

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1-20 (Canceled)

21. (Previously Presented) A method of manufacturing a yoke type magnetic head comprising:

forming a current perpendicular to plane magnetoresistance effect film including, in a film surface, a magnetic sensitive layer having a magnetization therein, a sense current flowing through the magnetoresistance effect film in a direction perpendicular to the film surface thereof,

patterning the magnetoresistance effect film in a shape of an element;

forming nonmagnetic films having an identical thickness of both sides of the patterned magnetoresistance effect film; and

forming a magnetic yoke covering the magnetoresistance effect film patterned in a shape of the element.

22. (Previously Presented) The method of manufacturing a yoke type magnetic head according to claim 21, comprising:

processing an upper portion of the nonmagnetic film above the magnetoresistance effect film to make a projection having an upper part substantially defining a magnetic gap and a lower part having an tapered angle; and

flattening a surface of the magnetic yoke so as to expose the projection of the nonmagnetic film.

23. (Previously Presented) The method of manufacturing a yoke type magnetic head according to claim 21, wherein a gap material film is formed on the magnetoresistance effect

film, an anisotropy etching is performed on a substrate, on which the magnetoresistance effect film is formed, from a direction inclined relative to a direction perpendicular to the surface of the substrate, thereby narrowing a width of the gap material film relative to a width of the magnetoresistance effect film.

24. (Previously Presented) The method of manufacturing a yoke type magnetic head according to claim 23, wherein the anisotropy etching comprises reactive ion beam etching.

25. (Withdrawn) A method of manufacturing a yoke type magnetic head comprising:
forming a magnetic yoke on a substrate, the magnetic yoke being electrically
conductive;

processing the magnetic yoke by FIB (Focused Ion Beam) so as to form a prospective
gap region;

forming a non-magnetic gap in the prospective gap region;

forming a current perpendicular to plane magnetoresistance effect film on the
nonmagnetic gap, the magnetoresistance effect film being electrically connected to the
magnetic yoke;

forming an electrode, which is connected to an upper surface of the magnetoresistance
effect film; and

separating the substrate from the magnetic yoke and the nonmagnetic gap.

26. (New) A method of manufacturing a yoke type magnetic head comprising:
forming a current perpendicular to plane type magnetoresistance effect film including,
in a film surface, a magnetic sensitive layer having a magnetization therein, a sense current
flowing through the magnetoresistance effect film in a direction perpendicular to the film
surface thereof,

patterning the magnetoresistance effect film in a shape of an element;

forming nonmagnetic films having an identical thickness all over the both sides of the patterned magnetoresistance effect film;

processing an upper portion of the nonmagnetic film above the magnetoresistance effect film to make a projection including an upper part having an identical width and a lower part having a tapered angle, the upper part substantially defining a magnetic gap which has a width narrower than the patterned magnetoresistance effect film;

forming a magnetic yoke covering the magnetoresistance effect film via the nonmagnetic films; and

flattening a surface of the magnetic yoke so as to expose the projection of the nonmagnetic film.

27. (New) A yoke type magnetic head manufactured by the method according to claim 26.

28. (New) A magnetic disk unit including a yoke type magnetic head according to claim 27 as a reproducing magnetic head.